Laney

Alliance

USER MANUAL

MODEL : VC50
: VC100
: VH100R

Laney

INTRODUCTION

Congratulations on your decision to purchase a **Laney** amplifier.

Laney products are designed with ease of operation as a primary objective, however to ensure you derive the best from your new amplifier, it is important you take time to read this user manual and to familiarise yourself with the control functions and facilities available

BEFORE SWITCHING ON

After unpacking your amplifier check that it is factory fitted with a three pin 'grounded' (or earthed) plug. Before plugging into the power supply ensure you are connecting to a grounded earth outlet.

If you should wish to change the factory fitted plug yourself, ensure that the wiring convention applicable to the country where the amplifier is to be used is strictly conformed to. As an example in the United Kingdom the cable colour code for connections are as follows.

EARTH OR GROUND - GREEN/YELLOW
NEUTRAL - BLUE
LIVE - BROWN

This manual has been written for easy access of information. The front and rear panels of each unit are graphically illustrated, with each control and feature numbered. For a description of the function of each control feature, simply check the number with the explanations adjacent to each panel.

Your **Laney** valve amplifier has undergone a thorough two stage, pre-delivery inspection, involving actual play testing, as well as valve burn in. Valves are the most important component in your **Laney** valve amp. However they are also the most fragile component. The glass envelope and valve filaments can easily be damaged in transit without any apparent signs of damage to the box, amp or valves. Valve damage is however quite simple to diagnose and even more simple to remedy. These procedures are explained later in this manual..

When you first recieve your **Laney** valve amp, follow these simple procedures:

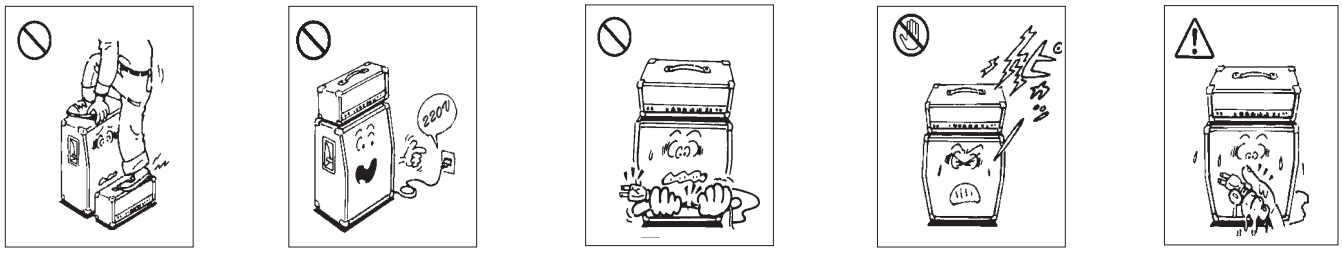
(i) Ensure that the amplifier is set at the correct voltage for the country it is to be used in.

(ii) Ensure that the speaker is connected to the appropriate socket.

(iii) Connect your instrument with a high quality shielded instrument cable. Use of cheap cables will compromise the sound of your instrument and your amplifier.

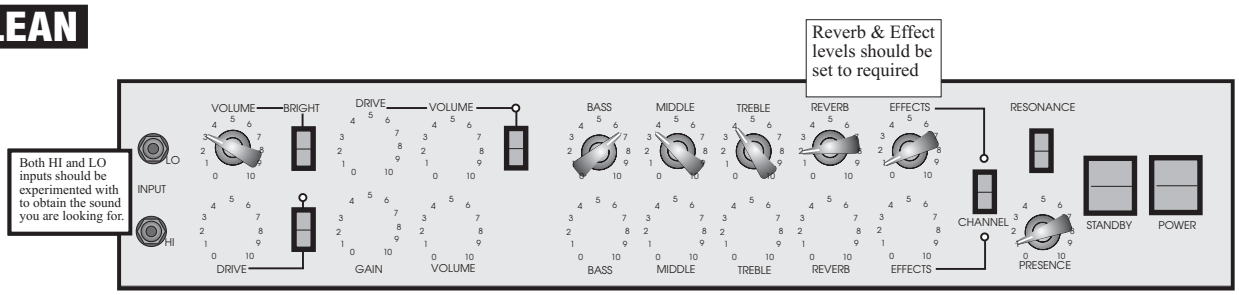
If there is a problem with your **Laney** valve amplifier

Care of your **Laney** amplifier will prolong it's life.....and yours!. If you follow these guidelines your equipment will give you years of playing pleasure

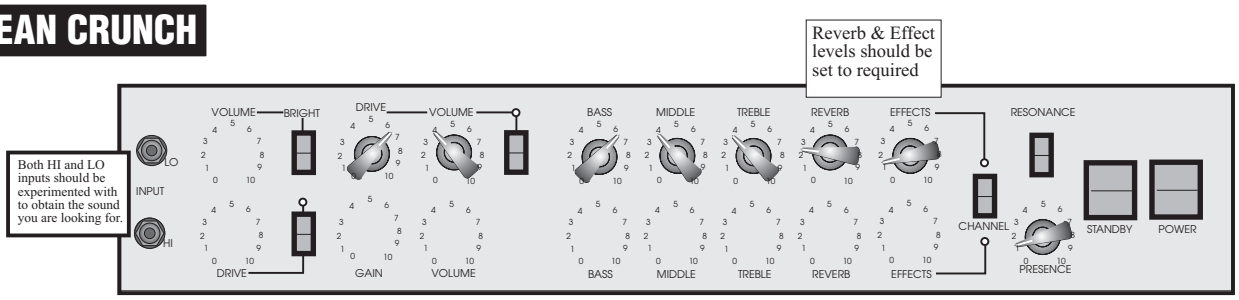


RECOMMENDED SETTINGS

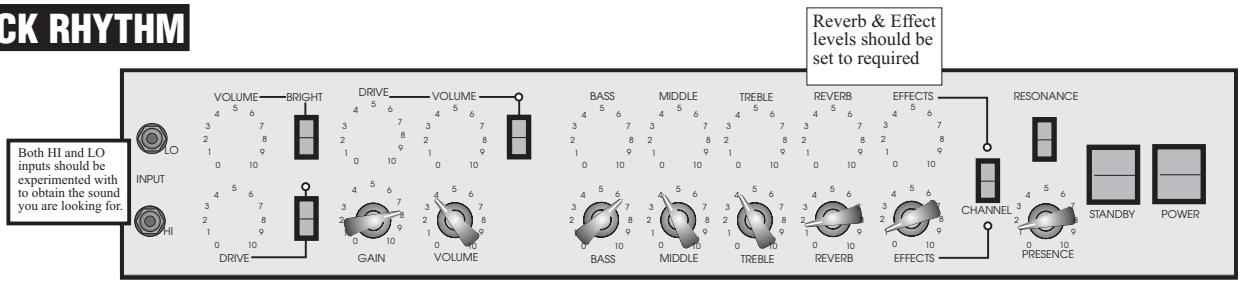
CLEAN



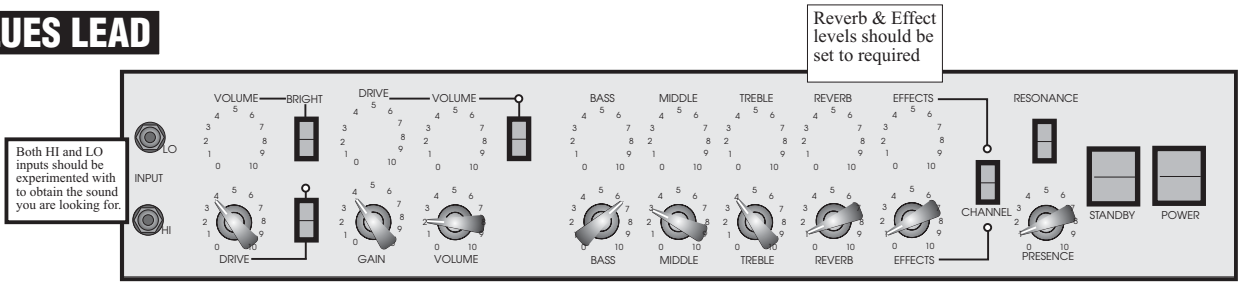
CLEAN CRUNCH



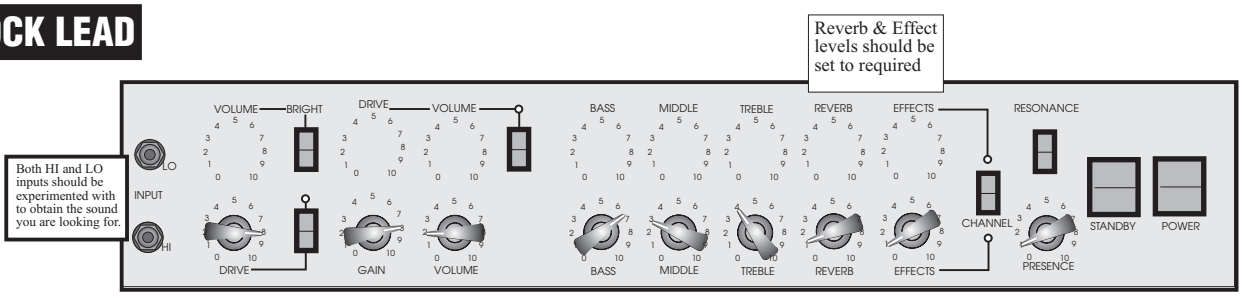
ROCK RHYTHM

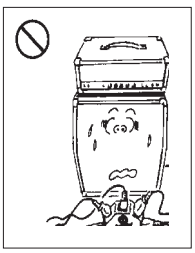


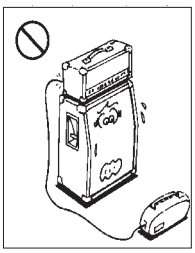
BLUES LEAD



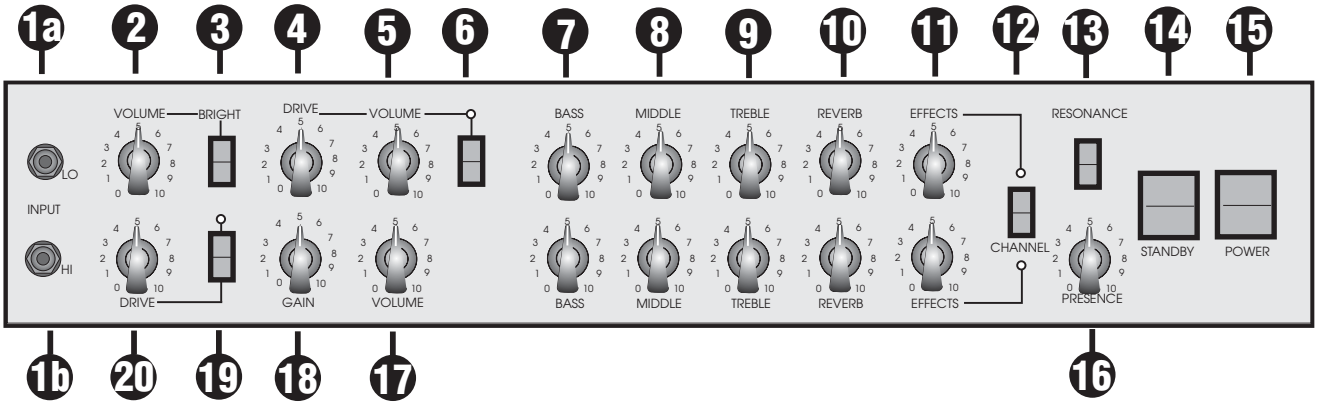
ROCK LEAD







MODEL VC50/VC100/VH100R



EXPLANATION OF TERMS

N.B. It should be noted that the layout of the control panel is reversed and inverted on the VH100R when compared to the layout diagrams

1a **LO INPUT:** This input is attenuated down approximately 6dB from the high input. It is useful in obtaining output that is "tight" not "mushy" from high gain humbucker type pickups.

2 **VOLUME:** Adjusts the overall volume of the clean channel

3 **BRIGHT SWITCH:** Adds brightness and sparkle to the upper frequencies of the clean and clean drive channel

4 **DRIVE:** This pot controls the amount of 'Valve" drive applied to the circuit.

5 **VOLUME:** Sets the overall volume level of the clean channel drive sound.

6 **DRIVE SWITCH:** Engages the clean channel drive sound (Also footswitchable)

7 **BASS:** Controls the low frequency EQ in the pre amplifier.

8 **MIDDLE:** Controls the mid frequency EQ in the pre amplifier.

9 **TREBLE:** Controls the high frequency EQ in the pre amplifier

10 **REVERB:** Controls the level of reverb assigned to each channel

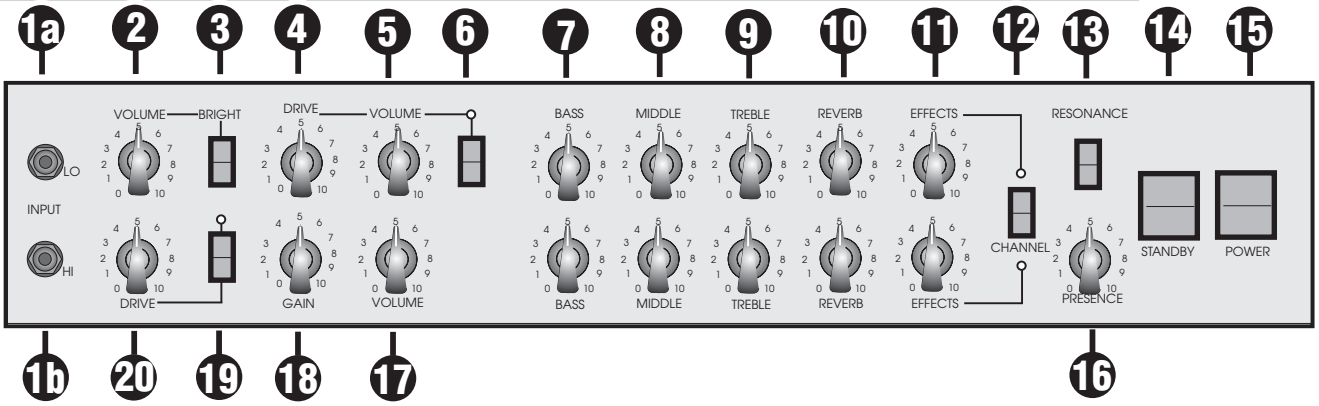
11 **EFFECTS:** Controls the signal level upon its return from an external processor and blends it to the desired level with the main signal.

12 **CHANNEL SWITCH:** Selects the required channel which is displayed by an illuminated indicator. The upper channel produces the clean tone and mild overdrive that is reminiscent of a sixties American valve combo. The lower channel produces the more substantial overdrive and distortion that is associated with British valve stacks.

13 **RESONANCE:** Adjusts the 'damping' control of the amplifier speaker enclosure, thereby controlling the 'tightness' of the bass responce. This effect is very cabinet dependant so the switch should be adjusted to taste.

14 **STANDBY:** This switch enables/disengages the high voltage DC to the valves, switching the amplifier from a 'wait state' to an 'active state'. The AC voltage to the heaters is not effected by this switch so that an instant on of the amplifier is achieved when switching to an active state, so long as the POWER SWITCH has remained in the ON position. Always switch the amplifier to the 'STANDBY' before turning the main power switch off. This will prolong valve life

MODEL VC50/VC100/VH100R



16 **PRESENCE:** Controls the high frequency material in the power amplifier.

17 **VOLUME:** Adjusts the overall volume of the overdrive channel

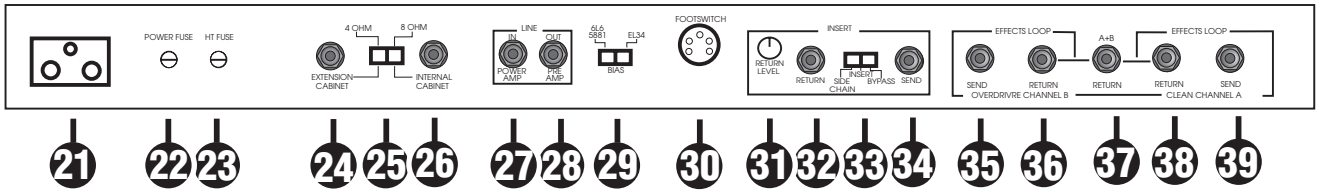
18 **GAIN:** Adjusts the input level of the overdrive channel.

19 **DRIVE SWITCH:** Allows activation of the overdrive section from the front panel.

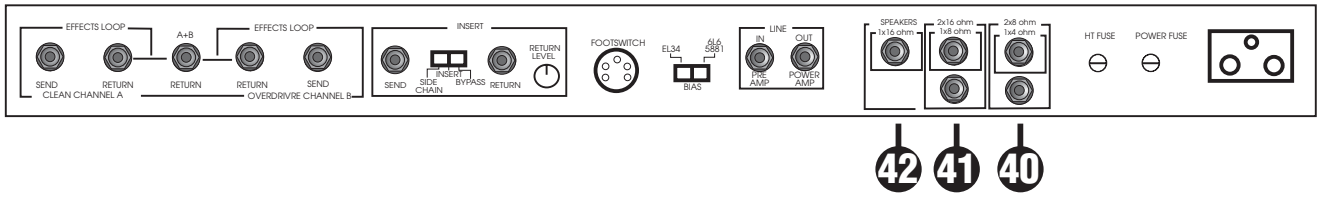
20 **DRIVE:** Controls the amount of valve overdrive. The overdrive is applied to the circuit just prior to the gain control. The drive is engaged only when the drive switch (19) is on. The drive may be operated by the switch or remotely by the footswitch (FS4) connected on the rear panel.

1b **HI INPUT:** This input provides maximum gain from the instrument to the pre amp. It is extremely useful for guitars with single coiled or low gain humbucker type pickups. Use of high gain pickups in this input may drive the pre amp to severely, causing a "mushy" output.

VC50/VC100 BACK PANEL

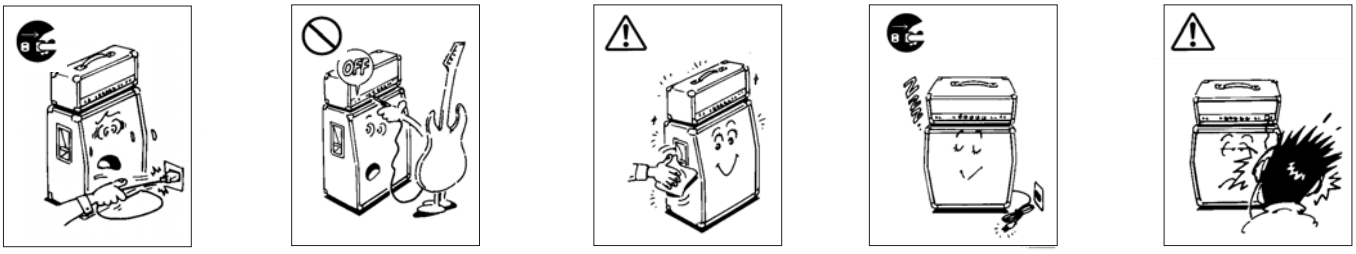


VH100R BACK PANEL



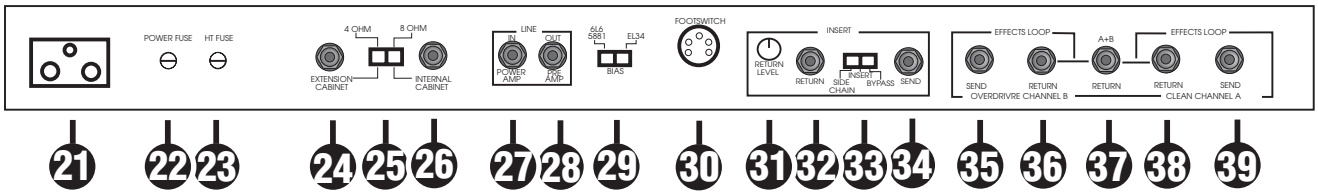
21 **POWER CONNECTOR:** This is where the mains cable attaches.

22 **POWER FUSE:** This fuse protects the AC power of the overall amplifier. Use ONLY the correct size and rating of fuse as specified on the panel. If a fuse blows or fails and a replacement of the same size and rating is installed and it in turn blows, the amplifier has suffered a malfunction internally and needs immediate service from a qualified technician DO NOT TRY USING A FUSE OF HIGHER RATING.

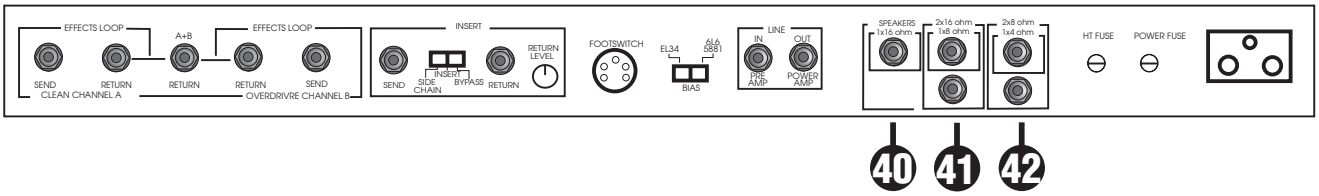


MODEL VC50/VC100/VH100R

VC50/VC100 REAR PANEL



VH100R BACK PANEL



23 **HT FUSE:** This fuse protects the DC power within the amplifier. Use only the correct size and rating fuse as specified on the panel. If a fuse blows or fails and a replacement of the same size and rating is installed and it in turn blows, the amplifier has suffered a malfunction, at this point check the output valves and replace faulty one if required. Should the valves not be the problem the amplifier should be checked out by a qualified technician. Do not try using a fuse of greater value. Using fuses that are too large in current rating may cause serious irrepairable damage to the amplifier. Fuses are designed in to PROTECT, DO NOT take chances.

24 **EXTENSION SPEAKER SOCKET:** Use to connect an 8ohm extension cabinet, model number GS212PE. When an extension cabinet is connected the resultant impedance will be 4 ohms and the speaker impedance switch should be set to 4 ohms. Mismatched impedance will reduce tha amplifiers performance and in some cases may cause damage to your amplifier.

25 **IMPEDANCE SELECTOR SWITCH:** This switches the internal impedance setting of the amplifier. When using with the 'on board' speaker set to 8 ohms. When an 8 ohm extension cabinet is also connected, set to 4 ohms.

26 **INTERNAL SPEAKER SOCKET:** 1/4" output jack factory connected to the 'on-board' speaker. With no extencion cabinet connected ensure that switch (5) is set to 8 ohms.

27 **POWER AMP/LINE IN:** This socket is provided to allow a signal to be fed directly to the power amplifier from an effects unit or other pre amplifier. Connection at this point disconnects the internal pre- amplifier. Nominal level 0dBu.

28 **POWER AMP/LINEOUT:** This socket provides an output from the pre-amplifier, post FX loop and may be used to drive other power amplifiers, FX units or mixing desks. Nominal level 0dBu.

29 **BIAS SWITCH:** This is factory set to suit the valves fitted (5881). Should you wish to use EL34 valves the bias switch should be re-set accordingly.

30 **FOOTSWITCH SOCKET:** This is a 5 pin 180 DIN socket for connection of the dedicated footswitch FS4 as supplied with the amplifier. FS4 is a four way switch for remote on both channels and reverb.

31 **RETURN LEVEL:** This control adjusts the signal level returning from an external FX unit and allows the correct mix to be achieved. This may also be used to provide additional pre amp gain for both channels when the switch is deployed in the insert mode regardless of whether an effect unit is connected or not.

32 **RETURN SOCKET:**This is provided to recieve the output of an external FX unit being driven from the send socket (14)

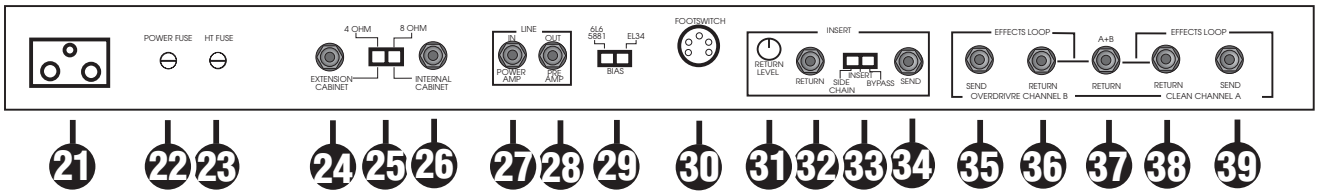
33 **FX MODE SWITCH:** For normal amplifier operation without FX this should be set to 'BYPASS' mode position. When the whole of the amplifier signal is required to be directed to an external effect, such as a Graphic Eq the switch should be set to ' INSERT' mode. The 'SIDE CHAIN' mode allows the connection of FX units such as delays, flangers etc, where a direct signal path is maintained to avoid the normal loss of dynamics through FX processors. When using this mode any FX unit should if possible be set to 'EFFECT ONLY' mode.

34 **FX SEND SOCKET:** This provides an output from the pre-amplifier to drive effects units in conjunction with (12) & (13). Nominal level 0dBu.

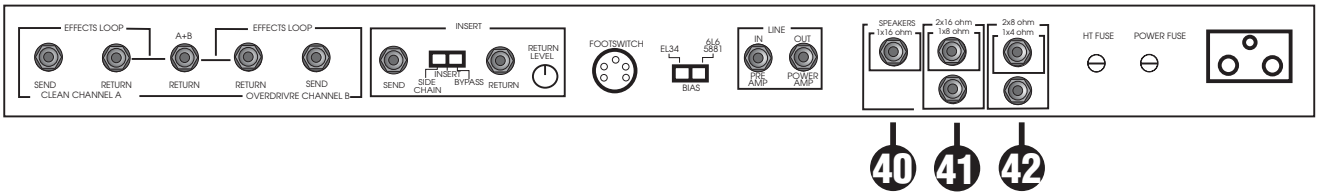
35 **FX LOOP SEND (OVERDRIVE CHANNEL):** This socket provides an output from the pre-amplifier for sending to an external FX processor. Processors fitted here operate in a 'side chain' mode and should be set for effect only operation if possible. Nominal level 0dBu

MODEL VC50/VC100/VH100R

VC50/VC100 REAR PANEL



VH100R BACK PANEL



36 **FX LOOP RETURN (Overdrive Channel):** This socket is provided to accept the output of an externalFX processor being driven from (15). The return level mix is controlled via the front panel effects level control.

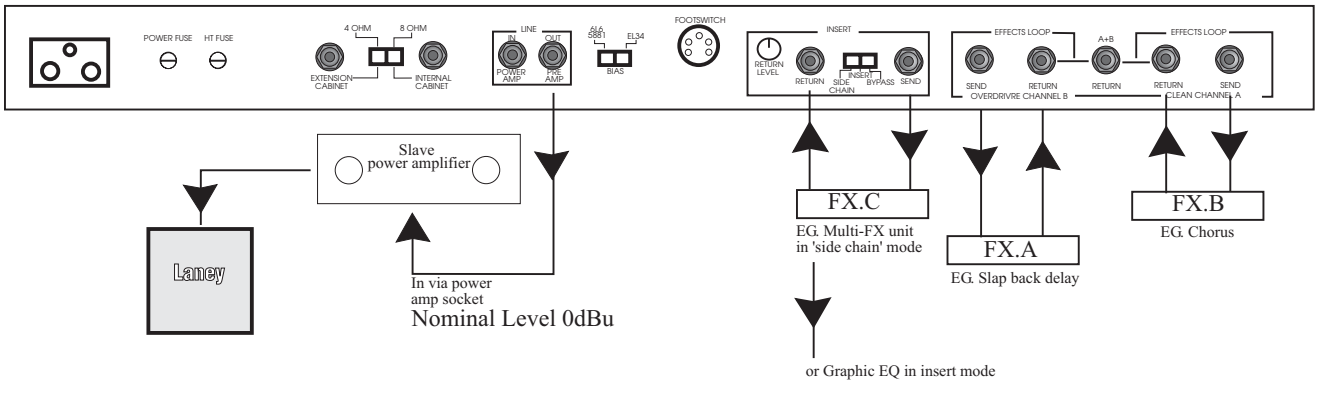
37 **FX LOOP RETURN A+B:** This socket is provided for use when a single effects unit is to be used, on both channels, at different mix levels, via the front panel effect level controls. In this set up the effects units may be driven from either channel send sockets.

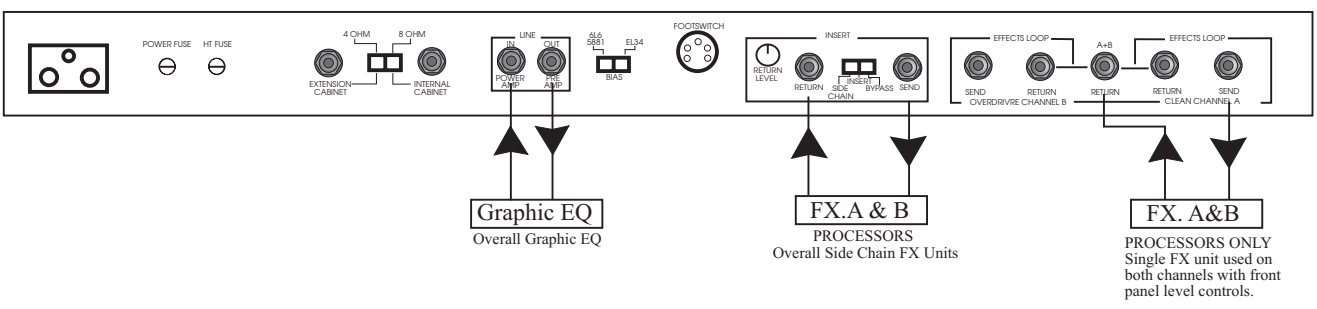
38 **FX LOOP RETURN (Clean Channel):** This socket is provided to accept the output of an external effects processor being drive from (19). The return level mix is controlled via the front panel effects control.

39 **FX LOOP SEND (Clean Channel):** This socket provides an output from the pre-amplifier for sending to an external FX processor. Processors connected here operate in the 'side chain' mode so should be set for effect only operation if possible. Nominal level 0dBu.

40 **SPEAKER OUTPUTS (VH100R):** A series of five 1/4" output jacks allows the user to correctly interface the output impedance of the amplifier to the selected speaker enclosures. In following the cabinet impedance **41** information printed around the appropriate jack or jacks, correct operation and impedance matching is ensured. Mismatched impedance will reduce the amplifiers performance and in some cases can cause irreparable damage. **42**

Ancillary Connection Examples





USEFUL HINTS AND TIPS

The following hints and tips are provided so that you can get the best performance out of your **Laney** valve amplifier. These are only guidelines and should be adapted for your own preferences:-

1: Valve amplifiers take a short time to 'warm up' to optimum operating temperature. To get optimum performance out of your amp allow the amplifier to 'warm up' for three mins. before you begin playing.

2: The position of an amplifier in a room has an effect upon the overall sound characteristics. If you wish to increase the bass responce of your amplifier place the amplifier on the floor. If you wish to reduce the bass response of your amplifier place the amplifier on a stand.

3: Do not place you amplifier hard up against a wall as this will reduce the air circulating around the back of the unit and may result in overheating.

4: Connecting your guitar to either the 'HI' or 'LO' input has an effect on the sound, regardless of the guitar type/pickup configuration. The 'HI' socket provides more gain. The 'LO' socket provides a lower gain. You should experiment with both inputs to find the one which suits your guitar, style of playing and gives you the most tonally pleasing results.

5: When using the 'BRIGHT SWITCH' on the amplifier keep in mind that it has a greater audible effect the lower the amount of distortion produced by the preamplifier. At some distortion levels the 'BRIGHT SWITCH' may appear to have no effect at all.

VALVE REPLACEMENT AND TROUBLE SHOOTING

The valves in your new valve amplifier will eventually need replacing due to wear, this is normal with valve amps. In most instances you should be able to effect valve replacement yourself without incurring the costs of a service engineer. Following are some of the most likely symptoms of valve malfunction and a suggested method of correction.

Normally valve amps give optimum performance when fitted with matched sets of output valves as factory fitted to all **Laney** valve amps. NB: Damage will not occur by not fitting matched sets although the amplifiers performance may be impaired.

SYMPTOM 1

Amp connections have been performed correctly but power light fails to illuminate

SOLUTION 1

Check time delay POWER FUSE and replace if necessary:-
100-120 Volts 5 Amp time delay
220-240 Volts 2 Amp time delay

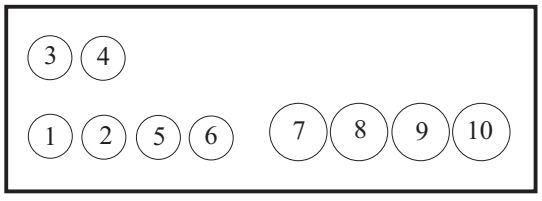
SYMPTOM 2

Power light illuminates, no sound out put

SOLUTION 2

Check secondary HT fuse and if blown replace with **1 amp time delay**

VALVE IDENTIFICATION



Pre Amplifier input valves 6xECC83

Power Aamplifier output valves 4x5881 matched quartet

VALVE FUNCTIONS

1 First gain stage-Clean channel
2 2nd gain stage-Clean channel
3 First gain stage Drive channel
4 2nd gain stage Drive channel
5 3rd gain stage Drive channel
6 Power driver stage
7 & 8 2x5881 Output valves for VC50
7,8,9&10 4x5881 Output valves for VC100/VH100R.

SYMPTOM 3

Secondary HT fuse (1Amp time delay) blows repeatedly. This is a strong indication of a damaged output valve. The valve function chart shows the valve layout and the function each performs.

SOLUTION 3

Replace the secondary fuse and turn on the power WITH STANDBY ENGAGED. View the output valves. If one of the valves fails to light up, replace that valve. If both of the output valves are lit dimily, look directly at the output valves abd disengage standby. If one of the valves flashes brightly or glows red hot in comparison to the adjacent valves, replace that particular valve. A simple way to verify that the valve is damaged is to switch the position of the suspect valve and follow the above procedure. If the valve exhibits the same symptoms in a different valve socket position, you can be certain that the valve is damaged.

If the output valve checks out OK, another cause of a blown secondary fuse is a damaged Driver pre amp valve No.6. Replace the Driver pre amp valve No.6 first and follow the above procedures. If the symptom persists, consult a qualified engineer, do not fit a higher rated fuse.

SYMPTOM 4

No pre amplifier boost on Drive channel

SOLUTION 4

Replace pre amplifier valves No. 1 & 2.

SYMPTOM 5

No clean channel, drive channel OK.

SOLUTION 5

Replace pre amp valve No. 3 & 4

SYMPTOM 6

Slow loss of power

SOLUTION 6

Check first for damaged output valves (glowing ,flashing or dead) by using the procedures described in symptom 3. Next check driver pre amp valve No.6.

All of these trouble shooting procedures can be performed quickly, without the aid of any sophisticated test gear. We suggest that you always maintain spare valves for emergency purposes. Keep your **Laney** free of dirt, dust and moisture to prevent performance failure Never subject your valve amp to environmental conditions that would not be comfortable to you!

Should other customer service be necessary, contact your authorised **Laney** dealer or call **Laney** service direct.

TECHNICAL SPECIFICATION

VC50

Maximum Power Consumption	200Watts
Supply Voltage (Factory Pre-set)	115/230 Volts
Supply Frequency	50/60Hz
Output Power	50 Watts
Input Impedance Hi	1 Meg Ohm
Input impedance Lo	470k Ohm
FX loop level (nominal)	0dB
FX send/return impedance	1k/100k Ohm
Speaker impedance	2x16 Ohm(8)
Extension speaker	8 Ohm
Speaker size	2x12"300mm
Speaker rating	80 Watts

VC100

Maximum Power Consumption	250Watts
Supply Voltage (Factory Pre-set)	115/230 Volts
Supply Frequency	50/60Hz
Output Power	100 Watts
Input Impedance Hi	1 Meg Ohm
Input Impedance Lo	470 K Ohm
FX loop level (nominal)	0dB
FX send/return impedance	1k/100k Ohm
Speaker impedance	2x16 Ohm (8)
Extension speaker	8 Ohm
Speaker size	2x12/300mm
Speaker rating	80 Watts

VH100R

Maximum Power Consumption	250 Watts	Supply Voltage (Factory Preset)	115/230 V
Supply Frequency	50/60 Hz	Output power	100 Watts
Input Impedance Hi	1 Meg	Input Impedance Lo	470 k Ohm
FX Loop/Line level (all nominal)	0dB	FX Send/Return impedance	1k/100 k Ohm

NEWLYN ROAD, CRADLEY HEATH
WEST MIDLANDS
B64 6BE
GREAT BRITIAN

In the interest of continuing product developement BLT Industries reserve the right to amend specifications without prior notice.